APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,486	04/30/2001	Joshua Bers	00-4064	2345

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VERIZON CORPORATE SERVICES GROUP INC.
C/O CHRISTIAN R. ANDERSEN
600 HIDDEN RIDGE DRIVE
MAILCODE HQEO3H14
IRVING, TX 75038

EXAMINER
AGDEPPA, HECTOR A

ART UNIT	PAPER NUMBER
2642	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/845,486	BERS ET AL.
Office Action Summary	Examiner	Art Unit	
	Hector A. Agdeppa	2642	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>19 August 2005</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,6-10 and 12-35* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3, 6-10, 12-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is in response to applicant's amendment filed on 8/19/05. Claims 1,

3, 6 – 10, and 12 - 35 are now pending in the present application. **This action is made**

final.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

2.   Claims 1, 3, 6 – 10, 28 – 30, 34, and 35 are rejected under 35 U.S.C. 103(a) as

being unpatentable over US 5,812,638 (Muller) in view of US 6,263,066 (Shtivelman et

al.)

As to claims 1, 3, 6 – 10, 30, and 34, Muller teaches a system and method wherein an incoming call is received at a call center/directory assistance facility and the caller is prompted with a prompting device 24 to provide audio input relating to the purpose for the call. The audio input is recorded by recording device 22 and the recording is provided to an operator/agent for servicing once the recording has been heard by the operator/agent. If no operator/agent is immediately available, the incoming call is put into a queue, and the audio input is stored. Once an operator/agent becomes available, the audio input is provided and the incoming call connected. (Fig. 2, Abstract, Col. 1, lines 49 – 59, Col. 4, line 11 – Col. 5, line 27)

Also, call processing system 10 includes a queuing system 28 which may be included in a switch. (Col. 5, lines 20 – 27) Moreover, any system that can receive an incoming call has a switching device of some sort that actually receives the call. There is no other way to receive a telephony call. The same is true if the claim is read as a caller being at a switching device.

Further note that the prompting device 24 and recording device 22 may be incorporated into an automated directory assistance system (ADAS) comprising a voice response device. Moreover, Muller teaches that a switch may be used to connect an operator/agent to the incoming call in the queue. Therefore, because, as seen in Fig. 2, recording device 22 and prompter 24 are elements separate from the queuing system 28, it is inherent that the incoming call is moved/transferred among those elements.

It is also inherent that some call identifier is associated with the call. Because the recording may be stored, the only way to relay both the queued incoming call and

the recording to the operator/agent together, at the right time, is to use some identifier to

associate the call and the recording.

Finally, Muller teaches that after the communication of incoming call information

to the operator, the operator and caller may be connected so that the call may be

completed with human-to-human interface. (Col. 8, lines 37 - 44) Therefore, it is clear,

that after a call is routed to a voice response device, the call may be transferred back to

the switch.

What Muller does not teach assigning a unique call identifier to the incoming call.

However, Muller teaches that well known and already used queuing means may

be implemented. Well known queuing methods in the ACD/call center arts include

priority queuing/queuing according to agents' skills, etc. as taught by Shtivelman et al.

(Col. 9, line 34 - Col. 10, line 37, Col. 10, line 57 - Col. 11, line 19 of Shtivelman et al.)

Such well known queuing means queue calls not only in a first-in-first-out basis.

Therefore, assigning a unique identifier to the call or using a unique identifier already

present in the call such as the ANI or caller ID is inherent. There is no way to queue

calls according to priority and skill set among various agents unless this is done.

It would have been obvious for one of ordinary skill in the art at the time the invention

was made because, as discussed, such queuing means are old and well known and

qualify as standard queuing means, which are at least contemplated by Muller.

Moreover, ACD/call center calls routinely monitor calls for agent performance, store

calls for statistical purposes, etc. For many years now, a caller, before being connected

to an agent, will hear an announcement indicating that the call may be recorded for

various these purposes. If no call identifier were assigned to these calls there would be

no way to later retrieve these calls.

As to claim 13, Muller teaches queuing calls with a queuer 28 and routing calls to

agents. (Col. 5, lines 9 – 27 of Muller) Shtivelman et al. teaches the same. (Col. 6,

lines 8 – 21, 30 – 42, Col. 7, line 38 – Col. 8, line 12, Col. 9, lines 18 – 33 of Shtivelman

et al.)

As to claims 14 – 17, see the rejection of claim 1 and also note that it is inherent

that some server or some element having server functionality to act as the call

processor/router. Even if that element is just the switch discussed above, the switch

reads on the claimed generic server with call routing functionality. Muller also teaches

that the information requested from a caller is not only the reason for the call such as a

directory assistance query, i.e., a telephone number, but also can glean, for example, a

language preference and a certain department requested. (Col. 4, lines 35 – 47 of

Muller) See also Col. 8, lines 2 – 3 of Shtivelman et al. wherein it is taught that "any"

relevant information associated with a caller / call record is retrieved. Finally, Muller

teaches that the operator/agent receives the audio input at a device 26 which can

perform speech recognition, has a display device 44, among other features. (Col. 5,

lines 28 – 67 of Muller) Clearly, without some means for playing the recorded

information, an agent would not be able to hear the recorded information. Moreover, a

data device is needed since stored audio is data.

As to claims 28 and 29, see the rejection of claim 1 above and note that any ACD

operates by forwarding calls to an agent. As described above, Muller teaches accepting

an incoming call to an ACD, not a particular agent. Of course, there are times when a

caller is provided a direct dial number to reach a particular agent, but the standard

mode of operation in any ACD is that a caller calls using for example, an 800 number as

anyone who has called a call center or directory assistance knows. After being

connected to the ACD, the call must be forwarded to an actual agent. In other words,

no agent directly answers the call and so connection to an actual agent requires

forwarding the call to the agent when on becomes available. See also Col. 5, lines 9 –

14 of Muller wherein Muller teaches "forwarding" the caller information OR

communicating it to the operator.

    As to claim 35, Muller teaches that the system 10 will alter/manipulate the timing

of the audio input recording to match the time it takes the operator/agent to

listen/process the recorded information with the time it takes to play a generic/pre-

recorded message to the caller so that the caller experiences no dead time in optimal

conditions. (Abstract, Col. 5, line 45 – Col. 8, line 36 of Muller) Effectively, the need for

an acknowledgement in the system of Muller is erased or interpreted differently, the

acknowledgement is integrated into the above-discussed timing feature.

    However, the above teachings of Muller are merely a choice to present a user-

friendly interface to a caller and such is merely a design choice or preference. It would

have been at the least, obvious, to one of ordinary skill in the art at the time the

invention was made to have required some acknowledgement that the audio input was

heard. The motivation is clear in that there would be no purpose to connecting the

caller to the operator/agent before they had heard the recorded audio input, or the very purpose of the invention would be defeated.

Remember, that as discussed above, Muller teaches that after communication of incoming caller information to the operator, the operator and incoming caller may actually be connected to effect human-to-human communications. Again, unless the operator has heard the incoming caller's audio input/recorded message there is no point to connecting them. It would completely defeat the purpose of Muller.

3.   Claims 18 – 27, and 31 - 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,812,638 (Muller), in view of US 6,263,066 (Shtivelman et al.), and further in view of US 5,991,390 (Booton).

As to claims 18 - 20, 23, 31, and 32, see the above rejection of claim 1.

Muller and Shtivelman et al. have been discussed above, but what they do not teach is a call center that uses conferencing to connect calls to available operators/agents.

However, many methods of connecting a caller to an operator/agent are known and commonly used methods are that of conferencing. A call center/directory assistance system are also well known as being implemented in a plurality of different environments because the act of connecting a caller to an agent can be thought of as a conference or as being received by the call center. Such a system is taught by Booton. (Col. 10, lines 12 – 26 of Booton)

It would have been obvious for one of ordinary skill in the art at the time the

invention was made to have implemented the call processing system of Muller using

conferencing because it is, as discussed, a well known and commonly used method.

Moreover, the Muller reference itself, recognizes this and teaches that any number of

conventional means may be used to connect the caller to the operator/agent. (Col. 8,

lines 42 – 43 of Muller) Such was not discussed in Muller because transferring,

sending, conferencing/initiating a separate call, forwarding (as discussed above) are all

well known, and all are viable options/methods.

Note that in conferencing, of course to connect the operator/agent to the caller

after hearing the recorded audio input is to "bridge" the call.

As to claims 21, 24, and 33, see the rejection of claim 35.

As to claims 22 and 25, as per standard conference calls, the initial connection,

which in this case, would be the call at the prompting device 24 and recorder 22, is

dropped once the call is bridged between conference participants, i.e., the caller and

operator/agent. There is no need for the connection any longer and is a waste of

resources besides being the standard method of operation in conference calling.

As to claims 26 and 27, Muller teaches that the incoming call is from the PSTN is

inherent or at the least obvious. Muller does not specify that the invention is only to be

used in a closed environment such as a PBX. In fact, Muller teaches that any caller can

call in and request directory assistance for any city or location which means the callers

are at least in some part of the leg, calling from the PSTN. (See the above noted

portions of Muller) For this same reason, the voice response device would have to send

the call over the PSTN. See also, Col. 10, lines 12 – 26 of Booton and note that when

an outgoing call is made to a remote agent, again, that call must be made over the

PSTN and if any information is collected from the caller using the voice response device

of Muller or the interactive voice response (IVR) taught by Booton, as taught by Muller,

that information too must be sent over the PSTN to whatever switching device services

the remote agent.

See the rejection of claims 18, 19, 23, and 31 and note that as discussed, any of

a plurality of well known methods of call connection are contemplated by Muller and

especially in the case of call conferencing, it is inherent that the PSTN is used inasmuch

as conferencing systems do not merely operate in a closed environment. The purpose

of conferencing is to connect parties from disparate networks, locations, etc. The only

common network allowing for this connectivity is of course, the PSTN. See also Fig. 1

of Shtivelman et al.

Another motivation for using the PSTN is if remote operators/agents were to be

employed. Providing a dedicated connection from the call center/directory assistance

center to a remote operator/agent is very costly and many systems merely use the

PSTN.

Response to Arguments

4.   Applicant's arguments filed 8/19/05 have been fully considered but they are not

persuasive.

As to applicant's arguments regarding Shitvelman's failure to teach assigning a

unique call identifier, examiner's reasoning directed to the Shtivelman teaching more

than a standard first-in-first-out basis were directed to applicant's earlier arguments filed

12/28/04. Applicants then asserted that Shtivelman taught no more than first-in-first-out

queueing, thereby negating the need to assign any type of identifier to a call as a call

could merely be handled in the order it enters the queue. However, as examiner

explained, Shtivelman does in fact teach more than standard first-in-first-out queueing

because calls may be handled out of order, i.e., placing a new call from a prior customer

at the head of the queue or providing the ability for a customer to be called back, record

priority bumping, etc. Hence, examiner still maintains that in order for a call to be

handled out of order, as to priority overriding the standard first-in-first-out schema, call

identifiers MUST be used.

Applicant's arguments merely assert that Shtivelman makes no explicit mention

of unique identifiers but never rebuts examiner's contention that unique identifiers are

necessary. Applicant furthermore never presents any OTHER manner of handling a call

out of order, via priority queuing, etc. without the use of a call identifier. If applicant

could present some other way of processing a call in these scenarios, only then

perhaps, would examiner's inherency argument be questionable. Moreover, applicant's

own prior art submissions, e.g., US 6,108,410 (Reding et al.) US 6,650,748 (Edwards et

al.) and US 6,882,641 (Gallick et al.) all teach the use of some type of unique call

identifier for queued calls in a call center, thus supporting examiner's assertion on P. 4

of the previous office action that assigning unique call identifiers for a myriad of

purposes is notoriously old and well known in the call center arts.

As to applicant's arguments regarding the audio input, examiner's rejection was

made in the previous rejection, and as discussed above, using the

argument/interpretation that incoming calls are associated with a unique identifier and

that both Muller and Shtivelman teach some form of audio input being associated with

an incoming call. Therefore, in fact, the unique identifier becomes associated with the

audio input, either directly or indirectly depending on one's interpretation.

As to applicant's arguments regarding lack of motivation to combine Muller and

Shtivelman, examiner maintains there is ample motivation to combine. Both Muller and

Shtivelman are of the same art, call centers, and even more specifically, call center

queuing methods. Both Muller and Shtivelman teach the recording of or input of some

audio. It is also well known in the art that call centers may use any of a plethora of

queuing methods / means and to use one method taught by Shtivelman in a call center

taught by Muller would be more than obvious. Moreover, even if Muller did not teach

the use of call identifiers (although again, as examiner argued previously, EVERY call is

uniquely identified by its ANI / callerID / etc. and if not, a call could never be processed).

Therefore, even if Muller did not "utilize" call identifiers, they are already there and

implementing a method that "did utilize" call identifiers would be obvious and would not

teach away, nor render the system of Muller inoperable.

As to applicant's arguments regarding an agent hearing the audio input,

the ONLY purpose to providing audio input to an agent of a call center is so that the

agent can now how to service the customer. Even in the abstract of Muller, it states "recording information provided by an incoming caller, replaying the recorded information to the operator to enable the operator to conduct a search..." It would be completely contrary to Muller or any other like system to process a call before an agent has heard the audio input indicating the purpose for the customer's call. Therefore, even though Muller discusses other variations on this idea, i.e., timing an operator's greeting with the recorded input, etc., would be obvious.

Also, applicant must note that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, because an agent must hear the recorded input before responding to the customer, it would almost be if not actually inherent that the system will wait until the agent has heard the information.

Even in Muller, simply because the invention is couched around creative timing of recordings and greetings to be more convenient for a calling customer, the fact that such timing is done is done so that the operator can hear the customer's recorded information. Therefore, in one interpretation, Muller actually does teach waiting, the indication aspect being incorporated into the timing of the exchange of recorded information and operator greeting. In other words, Muller has found a technique that can predict when an agent would indicate he/she has heard the information. In another

interpretation, Muller can be seen as preempting the need for an agent to indicate

he/she has heard the recorded information, and so, actually requiring the indication was

arguably contemplated by Muller and solved and so it would merely take a step

backwards to come up with the present invention from Muller.

As to applicant's arguments regarding the switch, see Fig. 1 of Shtivelman, and

note that any incoming call and any outgoing call must pass through a switch, either 17

or 21 and so even in a callback, any recorded information or queue information must be

sent to the agent who even in calling back a customer must utilize one of the above

switches which indicates bi-directional processing. See also Fig. 2 and Col. 9, lines 18

– 34 of Shtivelman and note that once a call is received an processed by an IVR / VRU,

it is placed in the queue. A call cannot be made from a queue and must therefore be

"transferred" back to the switch in order for the call to be made / completed.

Moreover, as seen with Shtivelman, it is common for call centers to use

intelligent peripherals such as IVR / VRU nodes that are separate from the switching

element but of course cannot process a call by itself. Therefore, any call to a call center

will be received by a switch first. That call will then be sent to the IVR / VRU node or

element. Once the IVR / VRU has completed its task(s), i.e., prompting the customer

for information and collecting that information, the call must be sent to the queue to

await processing. As is known in the art, when that call is to be processed,

communications will happen between an agent and the customer over the switch, NOT

the queueing element and not the IVR / VRU, hence again, bi-directional

communications as claimed and described by the applicant.

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hector A. Agdeppa whose telephone number is 571-

272-7480. The examiner can normally be reached on Mon thru Fri 9:30am - 6:00pm.
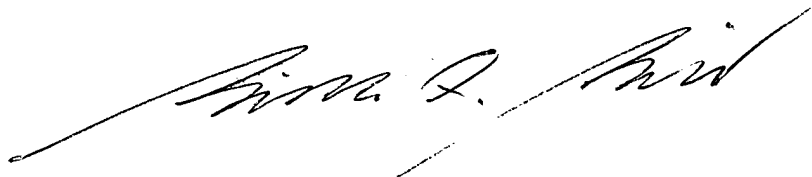
If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ahmad F. Matar can be reached on 571-272-7488. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Hector A. Agdeppa
Examiner
Art Unit 2642

H.A.A.
November 10, 2005

BING Q. BUI
PRIMARY EXAMINER